

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Hocevar (TI-36160)

Serial No. __/__,__

Group Art Unit:

Filed: Herewith

Examiner:

For: Layered Low Density Parity Check Decoding for Digital Communications

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313

Dear Sir:

Applicant wishes to bring the references listed on the enclosed PTO/SB/08A to the attention of the Patent and Trademark Office relative to the subject application.

Copies of the references are enclosed. Each reference is in the English language. As such, no additional statement of relevance is provided in this paper.¹

This Statement is filed within three months of the filing date of this application. This statement is therefore timely.²

By citing these references, Applicant does not admit that these references are, or are considered to be, material to the patentability of any of the claims of this application.³

¹ 37 C.F.R. §1.98(a)(3).

² 37 C.F.R. §1.97(a)(3).

Consideration of this information in the prosecution of this application is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to be "Rodney M. Anderson", with a long horizontal line extending to the left.

Rodney M. Anderson

Registry No. 31,939

Attorney for Applicant

Anderson, Levine & Lintel, L.L.P.

14785 Preston Road, Suite 650

Dallas, Texas 75254

(972) 664-9554

Express Mail Label No. ER 560860306 US

³ 37 C.F.R. §1.97(h).

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if KnownSheet 1 of 3

Application Number	
Filing Date	
First Named Inventor	Hocevar
Art Unit	
Examiner Name	
Attorney Docket Number	TI-36160

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 2004/0034828A1	02-19-2004	Hocevar	all
		US- 5406570	04-11-1995	Berrou et al.	all
		US- 5446747	08-29-1995	Berrou et al.	all
		US- 5563897	10-08-1996	Pyndiah et al.	all
		US- 5630156	05-13-1997	Privat et al.	all
		US- 6023783	02-08-2000	Divsalar et al.	all
		US- 6065147	05-16-2000	Pyndiah et al.	all
		US- 6108388	08-22-2000	Douillard et al.	all
		US- 6119264	09-12-2000	Berrou et al.	all
		US- 6122763	09-19-2000	Pyndiah et al.	all
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known			
		Application Number			
		Filing Date			
		First Named Inventor	Hocevar		
		Art Unit			
		Examiner Name			
Sheet	2	of	3	Attorney Docket Number	TI-36160

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		TANNER, et al., "A Class of Group-Structured LDPC Code", ISTA-2001 Proc. (Ambleside, England, 2001).	
		RICHARDSON, et al., "Design of Capacity-Approaching Irregular Low-Density Parity Check Codes", IEEE Trans. on Information Theory, Vol. 47, No. 2 (Feb. 2001), pp. 619-637.	
		RICHARDSON, et al., "Efficient Encoding of Low-Density Parity-Check Codes", IEEE Trans. on Information Theory, Vol. 47, No. 2 (Feb. 2001), pp. 638-56.	
		ZHANG, et al., "VLSI Implementation-Oriented (3,k)-Regular Low-Density Parity-Check Codes", IEEE Workshop on Signal Processing Systems (Sept. 2001), pp. 25-36.	
		BOUTILLON, et al., "Decorder-First Code Design", Proc.: Int'l Symp. on Turbo Codes and Related Topics (Brest, France, Sept. 2001).	
		SRIDHARA, et al., "Low Density Parity Check Codes from Permutation Matrices", 2001 Conference on Information Sciences and Systems (Johns Hopkins University, March 12, 2001)	
		LI, et al., "Generalized Product Accumulate Codes: Analysis and Performance", Global Communications Conference (Globecom)(IEEE, 2001), pp. 975-79.	
		MANSOUR, et al., "Turbo Decoder Architectures for Low-Density Parity Check Codes", Global Communications Conference (Globecom) (IEEE, 2002), pp. 1383-88.	
		MANSOUR, et al., "On the Architecture-Aware Structure of LDPC Codes from Generalized Ramanujan Graphs and their Decoder Architectures", 2003 Conf. Inf. Sci. (Mar. 12, 2002).	
		CHUNG et al., "Analysis of Sum-Product Decoding of Low-Density Parity-Check Codes using a Gaussian Approximation", Trans. Inf. Theory, V. 47, No. 2 (IEEE, Feb. 2001). 657-70.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	
		Filing Date	
		First Named Inventor	Hocevar
		Art Unit	
		Examiner Name	
Sheet 3	of 3	Attorney Docket Number	TI-36160

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		GALLAGER, Low-Density Parity-Check codes (MIT Press, 1963).	
		MACKAY, et al., "Comparison of Constructions of Irregular Gallager Codes", Trans. Comm., Vol. 47, No. 10 (IEEE, Oct. 1999), pp. 1449-54.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.